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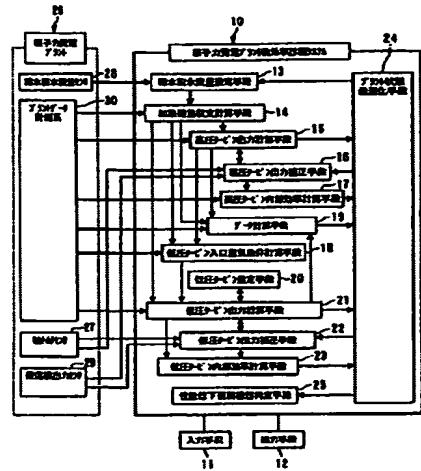
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[競業有]

(54) Title: THERMAL EFFICIENCY DIAGNOSING SYSTEM FOR NUCLEAR POWER PLANT, THERMAL EFFICIENCY DIAGNOSING PROGRAM FOR NUCLEAR POWER PLANT, AND THERMAL EFFICIENCY DIAGNOSING METHOD FOR NUCLEAR POWER PLANT

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- 20.. NUCLEAR POWER PLANT
- 21.. FEEDWATER/CONDENSED WATER FLOW SENSOR
- 22.. PLANT DATA MEASURING SYSTEM
- 23.. SHAFT TORQUE SENSOR
- 24.. GENERATOR OUTPUT SENSOR
- 25.. THERMAL EFFICIENCY DIAGNOSING SYSTEM FOR NUCLEAR POWER PLANT
- 26.. FEEDWATER/CONDENSED WATER FLOW SETTING MEANS
- 27.. HEATER HEAT BALANCE CALCULATION MEANS
- 28.. HIGH-PRESSURE TURBINE OUTPUT CORRECTION MEANS
- 29.. HIGH-PRESSURE TURBINE INTERNAL EFFICIENCY CALCULATION MEANS
- 30.. DATA CALCULATION MEANS
- 31.. LOW-PRESSURE TURBINE INLET STEAM CONDITION SETTING MEANS
- 32.. LOW-PRESSURE TURBINE OUTPUT CORRECTION MEANS
- 33.. LOW-PRESSURE TURBINE INTERNAL EFFICIENCY CALCULATION MEANS
- 34.. DEGRADATION ORIGINATING DEVICE SPECIFYING MEANS
- 35.. INPUT MEANS
- 36.. OUTPUT MEANS
- 37.. PLANT STATE OPTIMIZATION MEANS

(57) Abstract: A thermal efficiency diagnosing system (10) for a nuclear power plant, comprising a feedwater/condensed water flow setting means (13) temporarily setting a feedwater flow, a heater heat balance calculation means (14) calculating the heat exchange amounts of feedwater and condensed water in a heater, a high-pressure turbine output calculation means (15) for obtaining the calculated output value of a high-pressure turbine by assuming the degree of dryness of the nuclear power plant at the outlet of the high-pressure turbine, a high-pressure turbine output correction means (16) correcting the calculated output value of the high-pressure turbine by correcting the degree of dryness of the nuclear power plant at the outlet of the high-pressure turbine, a high-pressure turbine internal efficiency calculation means (17) calculating the internal efficiency of the high-pressure turbine, a low-pressure turbine inlet steam condition setting means (18) setting steam conditions at the inlet of a low-pressure turbine, a low-pressure turbine output calculation means (21) for obtaining the calculated output value of the low-pressure turbine, a low-pressure turbine output correction means (22) correcting the calculated output value of the low-pressure turbine, a low-pressure turbine internal efficiency calculation means (23) calculating the internal efficiency of the low-pressure turbine, and a degradation originating device specifying means (25) specifying a component causing the degradation of the nuclear power plant.

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